

ABSTRACT OF THE DISCLOSURE

A switchable fluid control valve assembly having a regulating spool and a pilot spool disposed within a common bore. A regulating spring urges the regulating spool toward a rest position wherein an oil supply port is fully uncovered. Supply oil entering the assembly causes the regulating spool to assume a position wherein oil flow is throttled to a downstream pressure insufficient to activate an associated valve deactivation mechanism but sufficient to provide lubrication to the engine. When activation of the mechanism is desired, a solenoid moves the pilot spool wherein oil at full pressure is engaged against the regulating spool, de-throttling the flow of oil to the mechanism. When the solenoid is again deactivated, a dump port is opened into the oil flow path, immediately reducing the pressure on the regulating spool which then moves to eclipse the supply port and open a path from the mechanism to drain.